

hp
scanjet
4600 series
digital flatbed
scanners



user's manual



hp scanjet 4600 series digital flatbed scanners

user's manual

copyright information

© Copyright Hewlett-Packard Company 2003

All rights reserved. Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under copyright laws.

This product incorporates Adobe's PDF technology, which contains an implementation of Lempel-Ziv-Welch (LZW) data compression licensed under U.S. Patent 4,558,302.

trademark credits



Adobe and the Acrobat logo are registered trademarks or trademarks of Adobe Systems Incorporated in the United States and other countries and regions.

Energy Star is a U.S. registered service mark of the United States Environmental Protection Agency.

Microsoft and Windows are registered trademarks of Microsoft Corporation.

All other product names mentioned herein may be trademarks of their respective companies.

document warranty

The information contained in this document is subject to change without notice.

Hewlett-Packard makes no warranty of any kind with respect to this information. HEWLETT-PACKARD SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Hewlett-Packard shall not be liable for any direct, indirect, incidental, consequential, or other damage alleged in connection with the furnishing or use of this information.

The TWAIN Toolkit is distributed as is. The developers and distributors of the TWAIN Toolkit expressly disclaim all implied, express or statutory warranties including, without limitation, the implied warranties of merchantability, noninfringement of third party rights and fitness for a particular purpose. Neither the developers nor the distributors shall be liable for damages, whether direct, indirect, special, incidental, or consequential, as a result of the reproduction, modification, distribution, or other use of the TWAIN Toolkit.

NOTICE TO U.S. GOVERNMENT USERS: RESTRICTED RIGHTS COMMERCIAL COMPUTER SOFTWARE: Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c) (1) (ii) of the Rights in Technical Data Clause at DFARS 52.227-7013.

Material scanned by this product may be protected by governmental laws and other regulations, such as copyright laws. The customer is solely responsible for complying with all such laws and regulations.

product restricted material

This HP product contains the following materials that might require special handling at end-of-life:

- mercury in the scanner fluorescent lamp and transparent materials adapter (< 5 mg)
- lead in solder

For recycling information, contact www.hp.com/go/recycle, your local authorities, or the Electronic Industries Alliance at www.eiae.org.

For information about HP's environmental stewardship program, see **environmental stewardship program** on page 21. For product warranty information see **hewlett-packard limited warranty statement** on page 20.



contents

how to use the scanner	1
scanner parts	1
place the scanner in the holder	1
front panel overview	2
scanning overview	3
position the item to scan	4
scan pictures and documents	8
print copies	8
share a scanned photo using HP Instant Share	9
scan oversized items	10
use the power save button	11
change settings	11
scanning text for editing	11
care and maintenance	12
how to scan slides and negatives	13
scan slides	13
scan negatives	15
troubleshooting	17
scanner installation or setup problems	17
scanner initialization and hardware problems	18
additional troubleshooting information	19
warranty	20
hewlett-packard limited warranty statement	20
regulatory information	21
environmental stewardship program	21
product support	23
accessibility website	23
hp scanjet website	23
support process	23
upgraded warranty options	27
product specifications and options	28
scanner specifications	28
transparent materials adapter (TMA) specifications	29
environmental specifications for the scanner and transparent materials adapter (TMA)	29

1

how to use the scanner

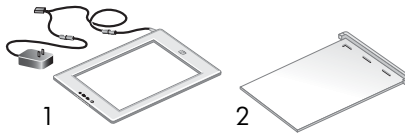
This manual describes the operation of HP Scanjet 4600 series scanners, including installation problems, customer support, and how to use the scanner.

For installation procedures, see the Setup Poster. For scanning software procedures, see the HP Photo & Imaging software Help.

This chapter of the manual presents an overview of the scanner and information about how to use and care for the scanner.

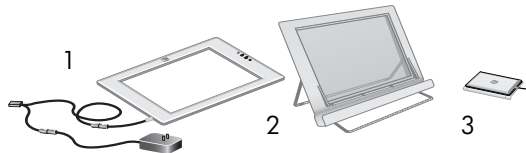
scanner parts

hp scanjet 4600 scanner



- 1 Scanner
- 2 Horizontal holder, with a hinge to hold the scanner. Used for positioning and holding items for scanning.

hp scanjet 4670 scanner




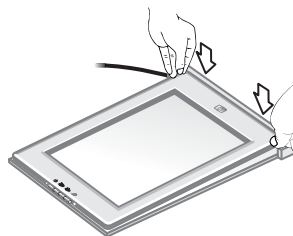
- 1 Scanner
- 2 Vertical holder, with folding legs for storage. Used for positioning and holding items for scanning.
- 3 Transparent materials adapter (TMA) for scanning 35 mm slides and negatives.

place the scanner in the holder

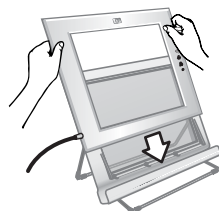
Note: The holder can be used for holding the scanner, positioning items to scan, and providing a flat surface on which to scan. The holder is not necessary for scanning.





place the scanner in the horizontal holder (hp scanjet 4600)

- 1 Set the horizontal holder on a flat surface. Make sure the hinge in the holder is rotated forward.
- 2 Lay the scanner on the holder, viewing side (light frame) up (), in contact with the hinge. The buttons face away from the hinge. The cord exits the scanner next to the hinge.
- 3 Press the back of the scanner down until it clicks into place in the hinge.

**place the scanner in the vertical holder (hp scanjet 4670)**

- 1 Make sure both legs are fully extended prior to placing the scanner in the holder. This ensures the holder is stable. Open the support legs by rotating them into place:
 - a. Open the rear support first; make sure it clicks into the fully open position.
 - b. Rotate the front support from behind the holder to the front of the holder until it clicks into place.
- 2 Set the holder on a flat surface.
- 3 Place the scanner in the holder, so the viewing side (light frame) faces you. The buttons are on the right side of the scanner. The cord exits the scanner at the lower left.
- 4 To align the scanner on the holder, slide the scanner from side to side in the holder until it is secured in the holder.

**front panel overview**

Feature	Description	
	SCAN button	Scans a photo or document and places it in the destination you specify.
	COPY button	Scans a photo or document and sends it to the default printer to make copies.
	HP INSTANT SHARE button	Scans a photo and allows you to 1) share it in e-mail; 2) create an album on the HP website; or 3) order professional-quality prints. (Not all services are available in all regions or for all operating systems.)
	POWER SAVE button	Turns off the scanner lamp and puts the scanner in low-power mode.

scanning overview

You can start scanning in one of three ways:

- from the front panel buttons
- from the HP Director
- from other applications


Note: Macintosh users, see the HP Photo & Imaging software Help for information about scanning procedures.

scan from the front panel buttons

The front panel buttons on the scanner provide shortcuts to frequently-used scanning functions, such as scanning documents and pictures. Descriptions for using the front panel buttons are located in this manual.

scan from the hp director

Scan from the HP Director when you want more control over your scan, such as when you want to preview the image before the final scan.

To start the HP Photo & Imaging software, double-click the HP Director icon () on the desktop. The HP Director window appears. From this window you can scan, view, or print images, use online Help, and more.

If the HP Director icon is not on the desktop, on the **Start** menu, point to **Programs** or **All Programs**, point to **Hewlett-Packard**, point to the name of your scanner or to **Scanners**, and then click **HP Photo & Imaging Director**.

scan from other applications


You can bring an image directly into an open file in one of your applications if the application is TWAIN-compliant. Generally, the application is compliant if it has an option such as **Acquire**, **Scan**, or **Import New Object**. If you are unsure whether the application is compliant or what the option is, see the documentation for that application.


position the item to scan

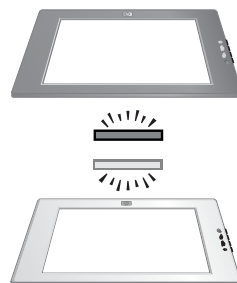
Because of the unique design of this scanner, this section describes how to position different types of items with the scanner.

scanning side and viewing side

The scanner has two sides: the scanning side and the viewing side:

Scanning side (): The scanning side has a dark frame around the glass, which always faces the item being scanned. The scanner lamp shines through this side when scanning. Keep the scanning side clean.


Viewing side (): The viewing side has a light frame around the glass, which shows the HP logo and product name. You can see the item to scan face up through the glass as you look at the viewing side. The scanner lamp shines away from this side when scanning. Fingerprints and dust on the viewing side do not affect scanning quality.

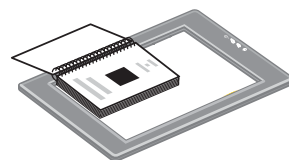


position the item face down and face up

You can scan pictures and documents in one of two positions: with the item face down or with the item face up.


position the item face down

When scanning an item face down, remove the scanner from the holder and lay it on a flat surface, scanning side (dark frame) up (). Then place the item (for example, a book) printed side down on the glass.

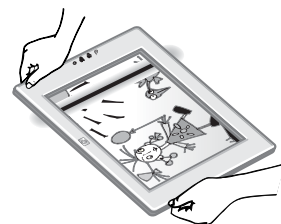


Tip: The side with the dark frame always faces the item being scanned.

position the item face up

When scanning an item face up, place the scanner viewing side (light frame) up () on the item. You can see the picture or text through the scanner glass. Some examples are:

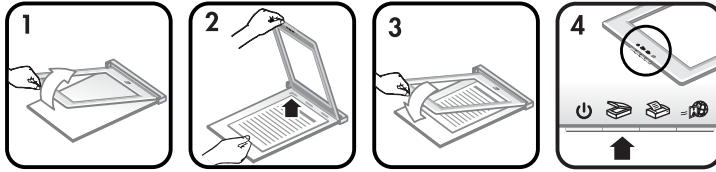
- With the scanner in the holder, scan a single document or photo.
- With the scanner removed from the holder, scan a photo laying on the desk.
- With the scanner removed from the holder, scan an item that is larger than the scanning glass.
- With the scanner removed from the holder, scan a photo hanging on the wall. *Note:* When scanning items on the wall, you *must* operate the scanner in landscape orientation.




Tip: The scan area is the area visible through the glass, bordered by the light frame on the scanner.

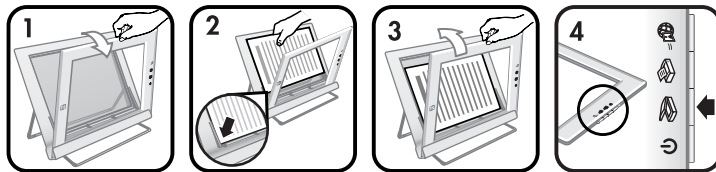
scan a single picture or document


scan a single item with an hp scanjet 4600



- 1 Lift the front edge of the scanner off the holder.
- 2 While holding the scanner up, position the item face up in the upper left corner of the holder, with the top of the item towards the hinge. Use the media placement tabs on the holder to help position the item.
- 3 Return the scanner to its original position on the holder. You can see the item face up through the scanner glass.
- 4 Press the **SCAN** button () on the front edge of the scanner. Follow the instructions in **scan pictures and documents** on page 8.

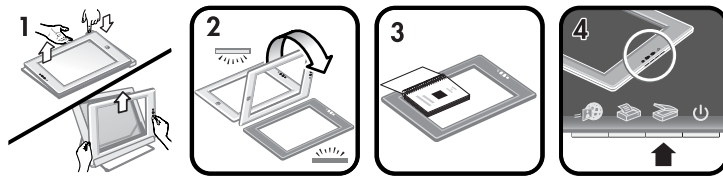
scan a single item with hp scanjet 4670





- 1 Pull the top edge of the scanner away from the holder, rotating the scanner forward in the holder. The scanner can rest against the front edge of the holder.
- 2 Position the item face up in the lower left corner of the holder, with the top of the item facing left. Use the media placement tabs on the holder to help position the item.
- 3 Return the scanner to its original position on the holder. You can see the item face up through the scanner glass.
- 4 Press the **SCAN** button () on the edge of the scanner. Follow the instructions in **scan pictures and documents** on page 8.

scan a page of a thick document

The best way to scan a thick document is to place the document printed side down on the scanner. This helps to make better contact between the document and the scanner glass.





- 1 Remove the scanner from the holder:
 - If you have a horizontal holder, remove the scanner by pressing down on one tab on the hinge and then lifting the scanner off the holder.
 - If you have a vertical holder, remove the scanner by lifting it off the holder.
- 2 Place the scanner on the desk, scanning side (dark frame) up ().
- 3 Place the document printed side down on the scanner glass. Use the dark frame to help position the document for scanning. The scan area includes the entire clear glass area, up to the dark frame edge.
- Tip:** To ensure better contact with the scanner glass, press down on the document you are scanning.
- 4 Press the **SCAN** button () on the edge of the scanner. Follow the instructions in **scan pictures and documents** on page 8.

If you are using an HP Scanjet 4600 scanner with a horizontal holder, and you attempt to use the holder to scan a thick document, the scanner may detach from the holder. This does not break the holder. Return the scanner to the holder and snap it onto the hinge.


If you are using an HP Scanjet 4670 scanner with a vertical holder, and you attempt to use the holder to scan a thick document, the scanner will not lay flat against the document and the image will not be clear. Follow the procedures in this section to remove the scanner from the holder and scan the document.

scan a picture or document on the desk





- 1 Remove the scanner from the holder:
 - If you have a horizontal holder, remove the scanner by pressing down on one tab on the hinge and then lifting the scanner off the holder.
 - If you have a vertical holder, remove the scanner by lifting it off the holder.
- 2 Place the scanner on the item, viewing side (light frame) up (). You can see the document through the scanner glass.
- 3 Press the **SCAN** button () on the edge of the scanner. Follow the instructions in **scan pictures and documents** on page 8.

scan pictures and documents

Use the **SCAN** button () to scan pictures and documents.


Note: Macintosh users, see the HP Photo & Imaging software Help for information about scanning procedures.

- 1 Position the item on the scanner. For more information, see **position the item to scan** on page 4.
- 2 Press the **SCAN** button ().
- 3 In the dialog box that appears, select:
 - **Picture** if you are scanning a printed photograph, graphic, slide, or negative.
 - **Document** if you are scanning text, both text and graphics, or any text that you want to edit later. (For more information on scanning text to edit, see **scanning text for editing** on page 11.)
- 4 Select a destination (where you want the software to send the image).
- 5 Click **Scan** in the dialog box. The item is scanned.
- 6 A dialog box appears, asking if you want to scan another image.
 - If you have more items to scan, place another item and either click **SCAN** in the dialog box or press the **SCAN** button () on the scanner.
 - If you have finished scanning your items, click **Done**.


The items appear in the destination specified in Step 4.

Note: By default, the software does not prompt you to preview the picture or document when you use the **SCAN** button on the scanner. If you want to preview the item, either change the button setting in the HP Director, or initiate the scan from the HP Director instead of the **SCAN** button on the scanner.

print copies

Use the **COPY** button () to scan an item and send it directly to a printer to make copies.

Note: Macintosh users, see the HP Photo & Imaging software Help for information about copying procedures.


- 1 Position the item on the scanner. For more information, see **position the item to scan** on page 4.
- 2 Press the **COPY** button () on the scanner. The copies are printed on the default printer.

A progress dialog box appears that shows the copy progress.

Note: To change any copy settings, such as size, darkness, or the printer, click **Cancel** in the **Copy in Progress** dialog box. The **HP Copying** dialog box appears, where you can change settings.

You can also make copies by accessing the HP Copying software from the HP Director. For more information, see the HP Photo & Imaging software Help.



share a scanned photo using HP Instant Share

Use the **HP INSTANT SHARE** button () on the HP Scanjet scanner to share scanned photos with family and friends. You can easily 1) send someone an e-mail with thumbnails and links to your photos stored on a secure HP website – no more attachments; 2) upload photos to the HP Photo website to create online photo albums; or 3) order professional-quality prints from an HP partner web site. (Not all services are available in all regions or for all operating systems.)

You must be connected to the Internet to use HP Instant Share.

Note: Macintosh users, see the HP Photo & Imaging software Help for information about using the **HP INSTANT SHARE** button.

Note: Use the **HP INSTANT SHARE** button to scan and share only photos. If you want to scan and share a document, use the **SCAN** button on the scanner.

- 1 Position the original photo on the scanner. For more information, see **position the item to scan** on page 4.
- 2 Press the **HP INSTANT SHARE** button (). The photo is scanned.
- 3 A dialog box appears, asking if you want to scan another image.
 - If you have more items to scan, place another item and either click **SCAN** in the dialog box or press the **SCAN** button () on the scanner.
 - If you have finished scanning photos, click **Done**.
- 4 All your scanned photos are sent to the HP Instant Share software. Follow the instructions on the screen to share your scanned photo.

Note: By default, the software does not prompt you to preview the photo when you use the **HP INSTANT SHARE** button on the scanner. If you want to preview the photo, use the HP Director instead of the **HP INSTANT SHARE** button on the scanner.



You can also access HP Instant Share using the software. For more information, see the HP Photo & Imaging software Help.


scan oversized items

If you have an item to scan that is larger than the scanning glass you can scan it in multiple sections, and then connect the sections with Panorama Maker software.

Use the Panorama Maker software to connect multiple scans. Use the ReadIris Pro software if you want to convert a document into editable text. If you did not install this software when you set up the scanner, insert the scanner CD to install it now. See the Setup Poster for installation information.


Note: Macintosh users, see the HP Photo & Imaging software Help for information about scanning procedures.

- 1 Remove the scanner from the holder:
 - If you have a horizontal holder, remove the scanner by pressing down on one tab on the hinge and then lifting the scanner off the holder.
 - If you have a vertical holder, remove the scanner by lifting it off the holder.
- 2 Place the scanner with the viewing side (light frame) up () on the item to scan. Place the scanner so you can see the upper left portion of the item through the scanner, using the frame around the scanner glass to position the item.
- 3 Press the **SCAN** button () on the scanner.
- 4 In the dialog box that appears, select:
 - **Picture** if you are scanning a photograph or other artwork.
 - **Document** if you are scanning text or both text and graphics. You must select **No** when asked **Scan for Editable Text (OCR)?**
- 5 Select Panorama Maker as the destination.
- 6 Click **Scan** in the dialog box. The item is scanned.

Note: If you see a preview dialog now, this procedure will not work as documented. See **turn preview image on or off** on page 11 to turn preview off.
- 7 Align the scanner on the next section of the item. Overlap the sections by at least 1.3 mm (1/2 inch). Press the **SCAN** button () on the scanner. Continue to scan each section of the item until you are done.
- 8 When you have finished scanning the sections, click **Done** in the dialog box on the computer screen.
- 9 Panorama Maker automatically starts. All the scanned sections are sent to Panorama Maker.
- 10 In the Panorama Maker software, arrange the images in the correct order and follow the on-screen instructions. See the Panorama Maker Help for instructions.
- 11 If you scanned a text document and want to use optical character recognition (OCR) to make the scanned document editable, then from Panorama Maker, save the combined image as a TIFF file, and then import the TIFF file into the ReadIris Pro software to perform OCR.

use the power save button

The scanner lamp turns off automatically after approximately 15 minutes. However, you may want to manually turn off the lamp when you have finished using the scanner.

To turn off the scanner lamp and put the scanner in low-power mode, press the **POWER SAVE** button ().

To use the scanner again, start a scan either from a button on the front panel or from the HP Director. After a short warm-up cycle, the scan begins.

change settings

You can customize some features of the HP Scanjet scanner, including the front panel button settings, previewing of images, and other preferences.

change settings from the hp director

When you use the scanner buttons or the HP Director, the scanner uses settings optimized for the scanned original type, such as a photograph. You can change scan settings from the Settings menu in the HP Director, including button settings, scanning preferences, and other settings. To change settings, start the HP Director, and then click **Settings**.

turn preview image on or off

Note: Macintosh users, see the HP Photo & Imaging software Help for information about turning preview on or off.

You can change whether a preview image appears or does not appear. To change this setting, start the HP Director, and then click **Settings**. Click **Scan Preferences**, and then go to the **Preview** tab. For more information, see the HP Photo & Imaging software Help.

scanning text for editing

The scanner uses Optical Character Recognition (OCR) to convert text on a page to text that you can edit on your computer. OCR is installed automatically when you install the scanning software during scanner setup.

Note: Macintosh users, see the HP Photo & Imaging software Help for information about scanning text.

- If you scan text but cannot edit it, make sure you choose the following selections during scanning:
 - **What are you scanning?** Select **Document**.
 - **Scan for editable text? (OCR)** Select **Yes**.
- Scanned text may not appear on your computer exactly as it appeared on the original, especially if the original contains faint or smudged text. For example, some characters may be incorrect or missing. As you edit the text, verify the scanned text and make corrections as necessary.
- To change text scanning options, from the HP Director click **Settings**, and then click **Scan Document Settings**.

care and maintenance

Occasional cleaning of your scanner helps ensure optimal performance. The amount of care necessary depends upon several factors, including the amount of use and the environment. You should perform routine cleaning as necessary.

Note: Avoid placing items with sharp edges in the scanner. Doing so can damage the scanner. Before placing an item on the scanner glass, make sure the item is free of wet glue, correction fluid, or other substances that can be transferred to the glass.

clean the scanner glass

Note: Dust and fingerprints affect scanning quality only on the scanning side (dark frame) of the scanner.

- 1 Disconnect the combination USB and power cable from the scanner.
- 2 Clean the glass using a soft, lint-free cloth sprayed with a mild glass cleaner.

Caution! Use only glass cleaner. Avoid abrasives, acetone, benzene, and carbon tetrachloride, all of which can damage the scanner glass. Avoid isopropyl alcohol because it can leave streaks on the glass.

Do not spray the glass cleaner directly on the glass. If too much glass cleaner is applied, the cleaner could run to the edges and damage the scanner.

- 3 Dry the scanner glass using a dry, soft, lint-free cloth.
- 4 When finished, reconnect the combination USB and power cable to the scanner.

clean the transparent materials adapter

If you have a transparent materials adapter for scanning slides and negatives, clean the window in the door and the light window using a slightly-damp, soft, lint-free cloth.

store the scanner

To prevent scratches on the scanning side of the scanner, store the scanner in the holder provided.

Tip: When not in use, use the scanner to display a favorite photo.

2

how to scan slides and negatives


With the HP Scanjet 4600 series scanner, you can use the transparent materials adapter (TMA) to scan 35 mm slides or negatives. The adapter is included with the HP Scanjet 4670 scanner, and can be purchased separately for the HP Scanjet 4600 scanner.

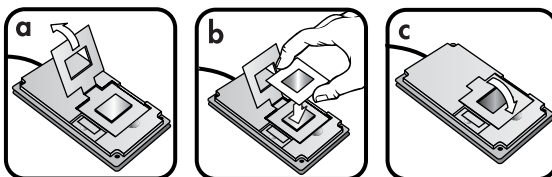
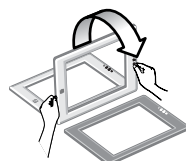
tips for scanning transparent items

- To scan large transparent items, such as a presentation transparency, place a white piece of paper in back of the transparency, and scan as usual.
- When scanning a 35 mm slide or negative, the scanner software automatically enlarges the image to approximately 11x15 cm (4x6 inch). If you want the final image to be larger or smaller, use the **Resize** tool in the scanner software to set the scaling to your desired final size; the scanner will scan the item at the proper resolution and enlargement for the size you choose.

Note: Macintosh users, see the HP Photo & Imaging software Help for information about scanning slides and negatives.

scan slides

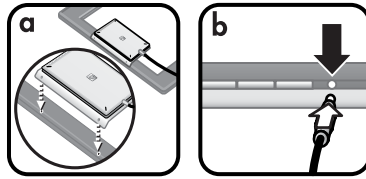
- 1 Remove the scanner from the holder and place it scanning side (dark frame) up () on a flat surface.
 - If you have a horizontal holder, remove the scanner by pressing down on one tab on the hinge and then lifting the scanner off the holder.
 - If you have a vertical holder, remove the scanner by lifting it off the holder.
- 2 Insert the slide into the transparent materials adapter:



- a. Open the door of the adapter.
- b. Place the slide on the adapter's light window. The slide should lay shiny side up, with the transparent portion seated on the raised light window. The rectangular orientation of the slide should match the orientation of the light window on the adapter.
- c. Close the door of the adapter.

Note: The viewing lamp on the adapter lights after you start scanning.

3 Attach the transparent materials adapter to the scanner:



- a. Place the adapter on the scanner, with the adapter window against the scanner. Fit the pegs of the adapter's clear plastic edge into the scanner holes.
- b. Plug the adapter cord into the scanner, in the TMA port next to the scanner buttons.

Note: The scanner scans the slide only when the transparent materials adapter is properly attached to the scanner.

4 Press the **SCAN** button ().

A dialog box appears asking what you are scanning.

5 Select **Picture**, and then click **Scan** in the dialog box.

6 Select **Slides from a Transparent Materials Adapter (TMA)**, and then click **Scan** in the dialog box.

The scanner performs a preview scan, and the preview image appears.

Note: A preview image always appears when scanning slides, regardless of the HP Director button setting.

7 Select a final scan area within the slide. Click and drag a border around the area you want for a final scan (final scan area).



8 Make any adjustments you want to the preview image. When the image adjustments are complete, click **Accept**.


9 A dialog box appears asking if there are more originals to scan. If you have more slides to scan:

- a. Click **Yes**.
- b. Place a new slide in the transparent materials adapter and reposition it on the scanner.
- c. In the preview window, click **New Scan**, make adjustments, and then click **Accept**.

10 When you have finished scanning your items, click **No** when you receive the prompt for another scan.


The images appear in the HP Photo & Imaging Gallery or other selected destination.

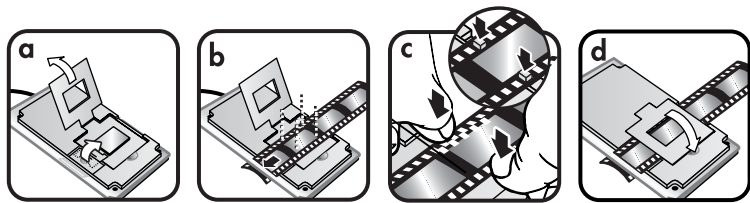
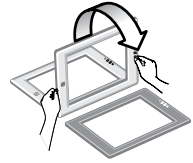
11 When finished, remove the adapter and slide.

You can initiate scanning a slide in other ways. For example, in HP Director, click **Scan Picture**. Or, if you know you'll be sharing an item, use the **HP INSTANT SHARE** button () on the front panel of the scanner.

scan negatives

Note: Negatives are easily damaged. Touch them only on their edges. You can also wear gloves to protect the negative.

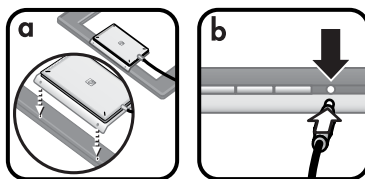
- 1 Remove the scanner from the holder and place it scanning side up (dark frame up) () on a flat surface.
 - If you have a horizontal holder, remove the scanner by pressing down on one tab on the hinge and then lifting the scanner off the holder.
 - If you have a vertical holder, remove the scanner by lifting it off the holder.
- 2 Insert the 35mm negative strip into the transparent materials adapter:



- a. Open the door of the adapter, and then open the small hinged flap towards the light window.
- b. Place the negative strip on the adapter's light window. The negative should lay shiny side up, with the curled edges pointing down. Use the media placement guides on the adapter to help position the negative strip across the light window.
Place the desired negative frame over the light window.
If necessary, thread the negative through the slot in the clear edge of the adapter.
- c. Line up the holes on the side of the negative with the position pegs on the small hinged flap. Secure the negative by pushing the edges of the negative on to the position pegs. Be careful to touch only the sides of the negative.
- d. Close the adapter door.

Note: The adapter viewing lamp lights only after you start scanning.

- 3 Attach the transparent materials adapter to the scanner:



- a. Place the adapter on the scanner, with the adapter window against the scanner. Fit the pegs of the adapter's clear plastic edge into the scanner holes.
- b. Plug the adapter cord into the scanner, in the opening next to the scanner buttons.

Note: The scanner scans the negative only when the transparent materials adapter is properly attached to the scanner.

- 4 Press the **SCAN** button ().

A dialog box appears asking what you are scanning.

- 5 Select **Picture**, and then click **Scan** in the dialog box.

- 6 Select **Negatives from a Transparent Materials Adapter (TMA)**, and then click **Scan** in the dialog box.

The scanner performs a preview scan, and the preview image appears.

Note: A preview image always appears when scanning negatives, regardless of the HP Director button setting.

- 7 Select a final scan area. Click and drag a border around the area you want for a final scan (final scan area).



Final scan area

- 8 Make any adjustments you want to the preview image. When the image adjustments are complete, click **Accept**.


- 9 A dialog box appears asking if there are more originals to scan. If you have more negatives to scan, click **Yes**, and then perform one of the following steps:

- To scan another frame from the same negative strip, remove the adapter from the scanner and re-position the negative strip so that the frame you want to scan is in front of the light window. Reposition the adapter on the scanner. In the Preview window, click **New Scan**, make adjustments, and then click **Accept**.
- Place a new negative strip in the adapter and reposition the adapter on the scanner. In the preview window, click **New Scan**, make adjustments, and then click **Accept**.

- 10 When you have finished scanning your items, click **No** when you receive the prompt for another scan.

The images appear in the HP Photo & Imaging Gallery or other selected destination.

- 11 When finished, remove the adapter and negative strip.

You can initiate scanning a negative in other ways. For example, in HP Director, click **Scan Picture**. Or, if you know you'll be sharing an item, use the **HP INSTANT SHARE** button () on the front panel of the scanner.

3

troubleshooting

This chapter contains solutions for installation and initialization problems.

scanner installation or setup problems

This section contains solutions for installation and setup problems.

check your computer

- Ensure that your computer meets the minimum system requirements that are listed on the scanner box.
- If you do not have enough hard-disk space, remove unnecessary files or install the software on a different disk drive.

use administrative privileges

If you are installing the scanner on a Microsoft Windows 2000 or XP system, you must be logged on as an administrator. See your operating system help for how to log on as an administrator.

use a valid folder

On a Microsoft Windows computer, if you receive a message such as "Destination Directory Is Invalid" or "Program Folder Is Invalid" during installation, you may not have read/write permissions to that folder.

check the cables

Cable type	Action
Power cable	<p>The power cable is connected between the computer and a power supply.</p> <ul style="list-style-type: none">• Ensure that the power cable is securely connected between the computer and a live electrical outlet or surge protector.• If the power cable is connected to a surge protector, ensure that the surge protector is plugged into an outlet and turned on.• Disconnect the power cable from the computer and turn off the computer. After 30 seconds, reconnect the power cable to the scanner, and then turn on the computer, in that order.

Cable type	Action
USB/ power cable	<p>The combination USB and power cable is connected between the scanner and the computer.</p> <ul style="list-style-type: none"> • Use the cable that was included with the scanner. Another USB cable might not be compatible with the scanner. • Ensure that the combination USB and power cable is securely connected between the scanner and the computer. <p>For additional USB troubleshooting information, see www.hp.com/support, select your country/region, and then use the search tool to find USB troubleshooting topics.</p>

Note: On a Macintosh computer, use the Apple System Profiler to ensure that the scanner is connected to the computer correctly.

scanner initialization and hardware problems

This section contains solutions for initialization and hardware problems.

reset the scanner

If you receive an error message similar to “Scanner initialization failed” or “Scanner not found” when trying to use the scanner:

- 1 Close the error message dialog box and close the application that was open when you received the error message. (Start a scan to see if the scanner is working now. If not, proceed with the next step.)
- 2 Disconnect the combination USB and power cable from the scanner, and then reconnect it. (Start a scan to see if the scanner is working now. If not, proceed with the next step.)
- 3 Shut down your computer, and then turn it off.

Note: It is important that the scanner and computer be turned off for at least 60 seconds before being restarted.

- 4 Before restarting the computer, disconnect the combination USB and power cable from the scanner and the computer.
- 5 Check the cables for any visible, external damage.
- 6 Firmly reconnect the combination USB and power cable to the computer. The cable must be inserted completely into the computer’s USB port.

Note: Remove any USB hub, if present. Use another USB port, if possible.

- 7 Verify that the power cable is firmly and correctly connected to a power source.
- 8 Firmly reconnect the combination USB and power cable directly to the scanner.
- 9 Restart the computer.

run the repair utility

If the scanner still fails to initialize, run the Repair utility (Windows computers only). For more information, access the Help system: open the HP Director, click **Help**, and then click **hp scanjet 4600 series scanner help**

test scanner hardware

If you think the scanner has a hardware problem, verify that the cables are firmly connected to the scanner, the computer, and the power source. If the cables are correctly connected, test the scanner using this procedure.

- 1 Disconnect the combination USB and power cable from the scanner.
- 2 Reconnect the combination USB and power cable to the scanner.

The carriage on the scanner will move forward and backward approximately 25 mm (1 inch), and the lamp will turn on.

If the carriage does not move and the scanner lamp does not turn on, a problem exists with the scanner hardware. See **product support** on page 23.

additional troubleshooting information

To solve other problems with the scanner, access the Help system: open the HP Director, click **Help**, and then click **hp scanjet 4600 series scanner help**

To solve problems with the scanner software, see the HP Photo & Imaging software Help.

This section contains warranty, regulatory, and environmental stewardship program information.

hewlett-packard limited warranty statement

HP products	Duration of limited warranty
HP Scanjet 4600 scanner HP Scanjet 4670 scanner	United States, Canada, and Latin America: 90 days Europe and Asia Pacific: 1 year

- 1 HP warrants to you, the end-user customer, that HP hardware, accessories, and supplies will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.
- 2 HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.
- 3 HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.
- 4 HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.
- 5 This warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts, or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.
- 6 TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED, AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries, states, or provinces do not allow limitations on the duration of an implied warranty, so the above limitation

or exclusion might not apply to you. This warranty gives you specific legal rights, and you might also have other rights that vary from country to country, state to state, or province to province.

- 7 HP's limited warranty is valid in any country or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter the form, fit, or function of the product to make it operate in a country in which it was never intended to function for legal or regulatory reasons.
- 8 TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries, states, or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- 9 THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT, OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

regulatory information

Regulatory information is located on the HP Photo & Imaging software CD that comes with the scanner. On the CD, browse for the file named `regulatory_supplement.htm`.

environmental stewardship program

protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with attributes to minimize impacts on our environment.

energy consumption

Energy usage drops significantly while the scanner is in low-power mode, which saves natural resources and saves money without affecting the high performance of this product. This product qualifies for ENERGY STAR®, which is a voluntary program to encourage the development of energy-efficient office products. As an ENERGY STAR Partner, Hewlett-Packard Company has determined that this product meets ENERGY STAR guidelines for energy efficiency.

plastics

Plastic parts over 25 g (0.88 oz) are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

disassembly/end of life

This HP product (the HP Scanjet 4600 series scanner) is designed for ease of disassembly and to provide end-of-life disposal options by use of common fasteners and snap-fitting parts.

product restricted material

This HP product contains the following materials that might require special handling at end-of-life:

- mercury in the fluorescent lamp in the scanner and transparent materials adapter (< 5 mg)
- lead in solder

For recycling information, contact **www.hp.com/go/recycle** or contact your local authorities or the Electronic Industries Alliance at **www.eiae.org**.

recycling materials

HP offers a variety of product end-of-life return programs in a number of geographic areas. To determine if a program is available in your area, please contact your nearest HP sales office.

Products returned to HP are reused, recycled, or disposed of in a responsible manner. Each month, HP reuses or recycles more than 1.6 million kg (3.5 million pounds) of material at our product recovery centers in Grenoble, France; Boeblingen, Germany; and Roseville, California, USA. This represents 99 percent by weight of all the material we receive from customers and HP operations.

This section contains support information including phone numbers and website information.

accessibility website

Customers with disabilities can get help by visiting www.hp.com/hpinfo/community/accessibility/prodserv/.

hp scanjet website

Visit www.scanjet.hp.com to:

- learn tips for scanning more effectively and creatively
- access HP Scanjet driver updates and software
- register your product
- subscribe to newsletters, driver and software updates, and support alerts
- purchase accessories, such as the transparent materials adapter (TMA)

support process

The HP support process works most effectively if you perform the following steps in the order specified:

- 1 Review the electronic help for the software and scanner, including the troubleshooting section.
- 2 Access the HP Consumer Support Website for support. If you have access to the Internet, you can obtain a wide range of information about your scanner. Visit the HP website for product help, drivers, and software updates at www.hp.com/support. The HP Consumer Support Website is available in the following languages: Dutch, English, French, German, Italian, Portuguese, Spanish, Swedish, Traditional Chinese, Simplified Chinese, Japanese, Korean. (Danish, Finnish, and Norwegian support information is available in English only.)
- 3 Access HP e-support. If you have access to the Internet, connect with HP via e-mail by going to www.hp.com/support. You will receive a personal reply from an HP Product Support technician. E-mail support is available in the languages listed at that website.
- 4 Contact your local HP dealer. If your scanner has a hardware failure, take it to your local HP dealer for a solution. Service is free during your scanner's limited warranty period. After the warranty period, the dealer will quote a service charge.

- 5 Contact the HP Product Support Center for support by phone. Please consult the following website to check the details and conditions of phone support in your country/region: **www.hp.com/support**. As a part of HP's continuing efforts to improve phone support information services, we advise you to check the HP website on a regular basis for new information regarding service features and delivery. If you cannot solve the problem by using the above options, call HP while you are in front of your computer and scanner. For faster service, please be prepared to provide the following information:

- the scanner's model number (located on the scanner)
- the scanner's serial number (located on the scanner)
- the computer's operating system
- the version of the scanner software (located on the scanner's CD label)
- messages displayed at the time the situation occurred

The applicable conditions for HP phone support are subject to change without notice.

Telephone support is free from the date of purchase for the period specified unless otherwise noted.

Locations	Free phone support period
Africa	30 days
Asia Pacific	1 year
Canada	90 days
Europe	1 year
Latin America	90 days
Middle East	30 days
United States	90 days

phone support in the United States

Support is available both during and after the warranty period.

Within the period of your warranty, telephone support is provided free of charge. Call (800) HPINVENT.

U.S. phone support is available in both English and Spanish 24 hours a day, 7 days a week (days and hours of support may change without notice).

After the warranty period, call (800) HPINVENT. Charges are \$25.00 U.S. per issue, and are charged to your credit card. If you think your HP product needs service, call the HP Product Support Center, which can help determine if service is required.

phone support in Europe, Middle East, and Africa

HP Product Support Center phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region: **www.hp.com/support**.

Algeria	+213 (0) 61 56 45 43
Austria	+43 (0) 820 87 4417
Bahrain	+973 800 728
Belgium	+32 070 300 005 (Dutch) +32 070 300 004 (French)
Czech Republic	+42 (0) 2 6130 7310
Denmark	+45 70202845
Egypt	+20 02 532 5222
Finland	+358 (0)203 66 767
France	+33 (0) 8 92 69 60 22 (Euro 0.34/min)
Germany	+49 (0) 180 5652 180 (Euro 0.12/min)
Greece	+30 10 60 73 603
Hungary	+36 (0) 1 382 1111
Ireland	+353 1890 923902
Israel	+972 (0) 9 830 4848
Italy	+39 848 800 871
Luxembourg	900 40 006 (French) 900 40 007 (German)
Morocco	+212 224 04747
Netherlands	0900 2020165 (Euro 0.10 per minute)
Norway	+47 815 62 070
Poland	+48 22 865 98 00
Portugal	+351 808 201 492
Romania	+40 1 315 44 42
Russian Federation	+ 7 095 797 3520 (Moscow) + 7 812 346 7997 (St Petersburg)
Saudi Arabia	+966 800 897 1444
Slovakia	+421 2 6820 8080
South Africa	086 000 1030 (RSA) +27-11 258 9301 (Outside RSA)
Spain	+34 902 010 059

Sweden	+46 (0) 77-120 4765
Switzerland	+41 0848 672 672 (German, French, Italian – Peak time 0.08 CHF/Outside peak 0.04 CHF)
Tunisia	+216 1 891 222
Turkey	+90 216 579 71 71
Ukraine	+7 (380 44) 490-3520
United Arab Emirates	+971 4 883 845
United Kingdom	+44 (0)870 010 4320

other phone support worldwide

HP Product Support Center phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region: **www.hp.com/support**.

Argentina	+54 0 810 555 5520
Australia	+63 (3) 8877 8000 (or local (03) 8877 8000)
Brazil	+55 (11) 3747 7799 (Grande São Paulo) +55 0800 157751 (Outside Grande São Paulo)
Canada	+1 905 206 4663 (During the warranty period) +1 877 621 4722 (After the warranty period)
Central America and the Caribbean	+1 800 711 2884
Chile	+56 800 22 5547 (Post-sales Business Computing) +56 800 360 999 (Post-sales Home Computing)
China	+86 (10) 6564 5959
Colombia	+57 9 800 114 726
Guatemala	+502 1 800 999 5105
Hong Kong SAR	+852 3002 8555
India	1 600 112267 or +91 11 682 6035 (Hindi & English)
Indonesia	+62 (21) 350 3408
Japan	0570 000 511 (Inside Japan) +81 3 3335 9800 (Outside Japan)
Korea, Republic of	+82 (2) 3270 0700 (Seoul) 0 80-999-0700 (Outside Seoul)
Malaysia	+60 1 800 805 405
Mexico	+52 58 9922 (Mexico City) +52 01 800 472 6684 (Outside Mexico City)

New Zealand	+64 (9) 356 6640
Peru	+51 0 800 10111
Philippines	+ 63 (2) 867 3551
Puerto Rico	+1 877 2320 589
Singapore	+65 6272 5300
Taiwan	+886 0 800 010055
Thailand	+66 (2) 661 4000
United States	1 800 474-6836 (800 HPINVENT)
Venezuela	+58 0 800 4746 8368
Vietnam	+84 (0) 8 823 4530

upgraded warranty options

You can select one of the following upgraded warranty options (available in the U.S. only):

- Standard Next Day Exchange
- Accidental Damage Protection with Next Day Exchange

Upgrade your standard factory warranty to three years with the HP SupportPack. Service coverage begins on product purchase date, and the pack must be purchased within the first 180 days of product purchase. HP will determine the hardware service offering based upon the outcome of system self-test programs run by the customer through the initial call to the HP Product Support Center. If during your technical support call it is determined that your product needs replacement, HP will ship you this replacement product next business day free of charge.

Optional Accidental Damage Protection is also available. This warranty upgrade protects against accidental breakage such as spills, drops, or falls. Both of these warranty upgrades offer maximized uptime and productivity, the convenience of door-to-door pickup with delivery, packaging, and freight prepaid by HP.


For more information call 1-888-999-4747 or visit www.homeandoffice.hp.com and select **warranty upgrades** under **product support**.



product specifications and options

This section contains the product specifications for the HP Scanjet 4600 series scanners and accessories.

scanner specifications

Name	Description
Scanner type	Flatbed
Scanner weight (without holder)	1.4 kg (3.1 pounds)
Holder weight	HP Scanjet 4600: 0.5 kg (1.1 pound) HP Scanjet 4670: 1.3 kg (2.9 pounds)
Maximum item size (without holder)	410 x 300 x 17 mm (16.14 x 11.81 x 0.67 inches)
Scanning element	2400 ppi (pixels per inch) linear sensor
Interface	Hi-Speed USB 2.0
Optical resolution	2400 ppi x 2400 ppi
Selectable resolution	12 dpi to 999,999 enhanced dpi at 100 percent scaling
AC line voltage	100-120 V 60 Hz – North America 200-240 V 50 Hz – Continental Europe, United Kingdom, Australia 100-240 V 50 Hz/60 Hz – rest of the world
Power consumption	For power consumption data, see the regulatory_supplement.htm file on the HP Photo & Imaging software CD.
	All HP Scanjet 4600 family scanners are ENERGY STAR compliant. As an ENERGY STAR partner, Hewlett-Packard Company has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

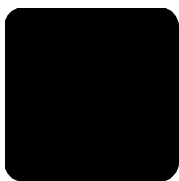
transparent materials adapter (TMA) specifications

The following specifications refer to the transparent materials adapter (TMA) and not the scanner. The adapter is included with the HP Scanjet 4670 scanner, and can be purchased separately for the HP Scanjet 4600 scanner.

Name	Description
Media types	1 35 mm slide or 1 frame of a 35 mm negative strip
Media capacity	Slide: 1.05 to 1.9 mm thick and 49.8 to 50.8 mm on any side
Size	24 x 106.8 x 168 mm (0.95 x 4.2 x 6.6 inches)
Weight	0.23 kg (0.5 pounds)
Power requirements	12.0 VDC, 340 mA, 4.22 watts (supplied by scanner)

environmental specifications for the scanner and transparent materials adapter (TMA)

Name	Description
Temperature	Operating: 10° to 35° C (50° to 95° F)
	Storage: -40° to 70° C (-40° to 158° F)
Relative humidity	Operating: 15 percent to 80 percent noncondensing 10° to 35° C (50° to 95° F)
	Storage: up to 90 percent at 0° to 65° C or (32° to 149° F)



index

A

accessibility website, **23**
album
 creating on the HP Photo
 website, **9**
Apple System Profiler, **18**

B

buttons
 Copy, **2, 8**
 HP Instant Share, **2, 9, 14, 16**
 Power Save, **2, 11**
 Scan, **2, 8**

C

cables
 connecting, **17**
 types, **17**
call support, **23**
cancel
 printing copies, **8**
clean
 scanner glass, **12**
 TMA, **12**
contact support, **23**
copies
 print, **8**
Copy button
 description, **2**
 use, **8**
customer support, **23**

D

destination directory invalid, **17**
disabilities assistance, **23**
documents
 scan large, **10**
 scanning, **8**
driver updates, **23**

E

edit text, **11**
electrical specifications
 TMA, **29**
end-of-life return programs, **22**
energy consumption
 Energy Star, **21**
Energy Star
 description, **21**

 website, **21**
environmental
 specifications, **29**
 stewardship program, **ii, 21**

F

face down scanning, **4**
face up scanning, **4**
final scan area, **14, 16**

H

hardware
 test mode, **19**
help
 phone support, **24**
 support, **23**
 websites, **23**
holder
 description, **1**
 horizontal, **2**
 place scanner, **2**
 vertical, **2**
horizontal holder, **1, 2**
HP Consumer Support
 Website, **23**
HP Instant Share, **9**
 use, **9, 14, 16**
HP Instant Share button
 description, **2**
HP Product Support Center, **23**
humidity specifications, **29**

I

import scans, **3**
install
 optical character recognition
 software (OCR), **11**
 Panorama Maker
 software, **10**
 ReadIris Pro software, **10**
 test hardware, **19**
Internet connection
 for HP Instant Share, **9**
invalid directory or folder
 message, **17**

L

low-power mode, **11**

M

maintain
 clean scanner, **12**
 TMA, **12**
merge multiple images, **10**
messages
 administrative privileges, **17**
 invalid directory or
 folder, **17**

N

negatives
 adapter, **15**
 clean adapter, **12**
 handling, **15**
 resolution, **13**
new drivers, **23**
newsletters, **23**

O

operating temperature
 specifications, **29**
optical character recognition
 (OCR), **10, 11**

P

Panorama Maker, **10**
phone support, **24**
photo
 scan large, **10**
pictures
 scanning, **8**
power consumption
 Energy Star, **21**
Power Save button
 description, **2**
 using, **11**
power specifications
 scanner, **28**
 TMA, **29**
preview images
 on or off, **11**
print
 copies, **8**
prints
 ordering, **9**
product specifications, **28**
product support, **23**
programs

scan from, **3**

R

ReadIris Pro, **10**

recycle, **21, 22**

register scanner, **23**

regulatory information, **21**

resolution

slides and negatives, **13**

return programs, **22**

S

scan

Copy button, **8**

from buttons, **3**

from HP Director, **3**

large items, **10**

negatives, **15**

overview, **3**

positioning, **4**

Scan button, **8**

Scan button, **2**

description, **2**

scan documents and

pictures, **8**

use, **8**

scanner

cleaning, **12**

glass cleaning, **12**

holder, **1**

low-power mode, **11**

parts, **1**

positioning, **4**

register, **23**

scanning side, **4**

storing, **12**

viewing side, **4**

scanning side, **4**

size

scanner, **28**

TMA, **29**

slides

clean adapter, **12**

inserting into adapter, **13**

resolution, **13**

software

updates, **23**

specifications

environmental, **29**

product, **28**

scanner, **28**

TMA, **29**

stewardship program, **21**

storage specifications, **29**

subscribe to newsletters, **23**

support

product support, **23**

T

technical support, **23**

telephone support, **24**

temperature specifications, **29**

test

scanner hardware, **19**

text scanning, **11**

TMA

clean, **12**

negatives, **15**

scan slides, **13**

slides, **13**

specifications, **29**

transparent materials adapter,

see TMA

troubleshoot

scanner hardware, **19**

TWAIN, **3**

U

update drivers, **23**

upgrade warranty, **27**

V

vertical holder, **1, 2**

viewing side, **4**

W

warranty, **ii, 20**

upgrade options, **27**

websites

disability assistance, **23**

Energy Star, **21**

scanjet, **23**

support, **23**

weight

scanner, **28**

TMA, **29**

www.hp.com

Printed in U.S.A. 2003



Q3112-90111